

adjacent vertebral bodies, respectively, said trailing end having a maximum height as measured from said upper edge to said lower edge adapted to fit within the disc space and between the vertebral bodies adjacent to the disc space; and

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C1 a plurality of bone screw receiving holes in said trailing end, at least one of which is adapted to only partially circumferentially surround a trailing end of a bone screw adapted to be received therein, at least one of said bone screw receiving holes passing through said exterior surface and one of said edges so as to permit the trailing end of the bone screw to protrude beyond said one of said edges.

Sub D2
C2 4. (Amended) The implant of claim 1, wherein said implant has a height equal to the distance between the adjacent vertebral bodies of a normal disc space.

Sub D5
C3 26. (Amended) A spinal implant for insertion at least in part across at least the height of a disc space between adjacent vertebral bodies, said implant comprising:
opposed upper and lower surfaces adapted to be placed toward and in contact with one each of the adjacent vertebral bodies, respectively, from within the disc space;
a leading end for insertion between the adjacent vertebral bodies; and
a trailing end opposite said leading end, said trailing end having an upper edge and a lower edge, said trailing end having a maximum height as measured from said upper edge to said lower edge adapted to fit within the disc space and between the vertebral bodies adjacent to the disc space, said trailing end being adapted to only partially circumferentially surround the circumference of at least one bone screw adapted to be received therein.

Sub D6
C4 29. (Amended) The implant of claim 26, wherein said implant has a height equal to the distance between the adjacent vertebral bodies of a normal disc space.

Sub D9
C5 44. (Amended) A spinal implant for insertion at least in part across at least the height of a

disc space between adjacent vertebral bodies, said implant comprising:

opposed upper and lower portions adapted to be placed toward and in contact with each one of the adjacent vertebral bodies, respectively, from within the disc space;

a leading end for insertion into the disc space and between the adjacent vertebral bodies; and

a trailing end opposite said leading end, said trailing end having an upper edge, a lower edge, and a maximum height therebetween, said maximum height being adapted to fit within the disc space and between the vertebral bodies adjacent to the disc space, said trailing end being adapted to receive at least a portion of a bone screw passing therein that extends beyond said maximum height immediately adjacent thereto.

Sub D10/47. (Amended) The implant of claim 44, wherein said implant has a height equal to the distance between the adjacent vertebral bodies of a normal disc space.

Sub D13/62. (Amended) A spinal implant for insertion at least in part across at least the height of a disc space between adjacent vertebral bodies, said implant comprising:

opposed upper and lower surfaces adapted to be placed toward and in contact with each one of the adjacent vertebral bodies, respectively, from within the disc space;

a leading end for insertion into the disc space and between the adjacent vertebral bodies; and

a trailing end opposite said leading end, said trailing end having a plurality of bone screw receiving holes, an upper edge, a lower edge, and a maximum height therebetween, said maximum height being adapted to fit into the disc space and between the vertebral bodies adjacent to the disc space, said maximum height of said trailing end being adapted to be less than the sum of the maximum diameter of two bone screws adapted to be inserted in

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C7 said bone screw receiving holes, said bone screw receiving holes being adapted to incompletely circumferentially receive at least one of the bone screws.

Sub D14
C8 65. (Amended) The implant of claim 62, wherein said implant has a height equal to the distance between the adjacent vertebral bodies of a normal disc space.

C9 70. (Amended) The implant of claim 69, wherein said plurality of bone screw receiving holes includes a pair of screw receiving holes along said upper edge and a pair of screw receiving holes along said lower edge, one of said pair of bone screw receiving holes being adapted to position bone screws in a convergent relationship to one another.

Sub D17
C10 81. (Amended) A spinal fusion implant for insertion at least in part across at least the height of a disc space between adjacent vertebral bodies, said implant comprising:

opposed upper and lower surfaces adapted to be placed toward and in contact with each of the opposed adjacent vertebral bodies, respectively, from within the disc space;

a leading end for insertion into the disc space and between the adjacent vertebral bodies;

a trailing end opposite said leading end, said trailing end having an exterior surface and an outer perimeter with an upper edge and a lower edge adapted to be oriented toward the adjacent vertebral bodies, respectively, said trailing end having a maximum height as measured from said upper edge to said lower edge adapted to fit within the disc space and between the vertebral bodies adjacent to the disc space; and

a plurality of bone screw receiving holes in said trailing end, at least one of which is adapted to only partially circumferentially surround the trailing end of a bone screw adapted to be received therein, at least one of said screw receiving holes passing through said exterior

surface and one of said edges so as to permit the bone screw to protrude over one of said edges within a plane of said trailing end; and

at least one bone screw, said screw having:

a leading end for placement in the vertebral body; and opposite,

a trailing end adapted to cooperatively engage said implant so as to prevent the further advancement of the screw into the bone and to be retained within said implant.

84. (Amended) The implant of claim 81, wherein said implant has a height equal to the distance between the adjacent vertebral bodies of a normal disc space.

100. (Amended) An interbody spinal implant for insertion at least in part across at least the height of a disc space between adjacent vertebral bodies, said implant comprising:

opposed upper and lower surfaces adapted to be placed toward and in contact with each of the adjacent vertebral bodies, respectively, from within the disc space;

a leading end for insertion into the disc space between the adjacent vertebral bodies; and

a trailing end opposite said leading end, said trailing end having an exterior surface and an outer perimeter with an upper edge and a lower edge adapted to be oriented toward the adjacent vertebral bodies, respectively, said trailing end having a maximum height as measured from said upper edge to said lower edge adapted to fit within the disc space and between the vertebral bodies adjacent to the disc space; said outer perimeter having at least one gap therein for permitting a portion of a bone screw to protrude over the outer perimeter of said trailing end within a plane of said trailing end, said gap being sufficient to retain a trailing end of the bone screw.

103. (Amended) The implant of claim 100, wherein said implant has a height equal to

and
C13

the distance between the adjacent vertebral bodies of a normal disc space.

Please add the new claims:

-- 149. The implant of claim 1, wherein at least one of said bone screw receiving holes passes through said upper edge and at least one of said bone screw receiving holes passes through said lower edge of said trailing end.

150. The implant of claim 26, wherein at least one of said bone screw receiving holes passes through said upper edge and at least one of said bone screw receiving holes passes through said lower edge of said trailing end.

C14

151. The implant of claim 62, wherein at least one of said bone screw receiving holes passes through said upper edge and at least one of said bone screw receiving holes passes through said lower edge of said trailing end.

152. The implant of claim 81, wherein at least one of said bone screw receiving holes passes through said upper edge and at least one of said bone screw receiving holes passes through said lower edge of said trailing end. - -

REMARKS

Applicant amended claims 1, 4, 26, 29, 44, 47, 62, 65, 70, 81, 84, 100, and 103 and added new claims 149-152 to further define Applicant's claimed invention.

In the Office Action, the Examiner rejected claims 1-14, 17-34, 37-52, 55-71, 74-91, 94-109, and 112-148 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,066,175 to Henderson et al. in view of U.S. Patent No. 6,214,005 to Benzel et al. and rejected claims 15, 16, 35, 36, 53, 54, 72, 73, 92, 93, 110, and 111 under 35 U.S.C. § 103(a) over Henderson et al. and Benzel et al., further in view of U.S. Patent No. 5,364,399 to Lowery et al.